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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,992	05/19/2008	Horst Greiner	DE 030229	1252

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CORPORATE PATENT COUNSEL
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EXAMINER

DZIERZYNSKI, EVAN P

ART UNIT	PAPER NUMBER
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2875

MAIL DATE	DELIVERY MODE
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01/06/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,992

Applicant(s)

GREINER, HORST

Examiner

EVAN DZIERZYNSKI

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
Paper No(s)/Mail Date 6/13/2008

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by West et al. US PAT 6974229.

As for claim 1, West discloses a luminous body with a housing (Fig 3) having a light emission surface 31, 33 and a plurality of light sources 44 arranged in the housing (Fig 3) whose light is radiated at least substantially in a direction parallel to the light emission surface (Fig 6), wherein inner walls of the housing 37s reflect the light at least partly (col 3, ln 35+).

As for claim 2, West discloses that the light sources are laterally emitting LEDs (col 4, ln 20-50).

As for claim 3, West discloses that the light sources each comprise an LED element 44 and a lens body (Fig 5, col 4, ln 29) provided thereon and emitting the light substantially in a direction perpendicular to its axis (Fig 6).

As for claim 7, West discloses that the light emission surface is formed by a partly transparent, diffusely scattering diffuser plate 31, 33.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over West in view of Rosenitsch US PAT 5819454.

As for claim 4, West discloses the device as discussed above, but fails to teach or disclose the LED elements being inserted into a bottom surface of the housing, and the lens bodies extending through a cover plate arranged over the bottom surface. Rosenitsch teaches LED elements 2 being inserted into a bottom surface of a housing (Fig 4). It would have been obvious for one of ordinary skill in the art to place the LEDs into the bottom surface of the housing, as shown by Rosenitsch, and it would have been an obvious rearrangement of parts to have the lenses extend through the cover plate, to provide an improved mounting means for the LEDs and lenses of West. One would have been motivated to make this combination to provide an improved means for mounting and securing the LEDs and lenses of West.

Claims 5, 6, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over West in view of Burrows US PAT 4181925.

As for claim 5, West discloses surfaces of the lens bodies are provided with a reflective means 40 that reflects light components from issuing from said bodies at least substantially. West further discloses the use of reflective coatings as a reflective means for the device (col 3, ln 35-55), but fails to specifically teach or disclose the reflective means as being a coating. It would have been obvious for one of ordinary ingenuity to use a reflective coating such as that disclosed by West in Col 3, ln 35+ as an alternative reflecting means for the lens bodies.

As for claim 6, West discloses an intermediate layer 52 provided which extends over the lens bodies (5) and which reflects light components issuing from said bodies at least substantially (col 7, ln 22+). West further discloses the use of reflective coatings as a reflective means for the device (col 3, ln 35-55), but fails to specifically teach or disclose the reflective means for the lens body as being a coating. It would have been obvious for one of ordinary ingenuity to use a reflective coating such as that disclosed by West in Col 3, ln 35+ as an alternative reflecting means for the lens bodies.

As for claim 8, West further discloses that the diffuser plate is covered with members that affect the diffuser plates transmittance (34, col 3, ln 55+), but fails to specifically teach or disclose that the transmittance of the diffuser plate is reduced in those regions which lie opposite the lens bodies. It would have been obvious for one of ordinary skill in the art to rearrange the members 34 opposite the lens bodies, for a desired luminance, since West suggests that the location, size, and shape of the openings in high reflectance material 34 may be selected based on the desired brightness profile, the type and placement of LEDs 36, and the shape of mixing

chamber 37 (col 3, ln 55+). One would have been motivated to make this combination achieve a desired luminance.

As for claim 10, West discloses that the light emission surface 33 is covered with an optical member (reflectance material 34) which allows light to pass through substantially only within certain angular regions (Fig 3). It would have been obvious for one of ordinary ingenuity to use a reflective foil such as that disclosed by West in column 7, ln 35+, as an alternative reflecting means for the reflective optical members on the emission surface. *KSR International Co. v. Teleflex Inc.*, 550 U.S. -, 82 USPQ2d 1385 (2007).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over West in view of Burrows US PAT 4181925.

As for claim 9, West discloses the device as discussed above, but fails to teach or disclose that the diffuser plate comprises a phosphor material that converts the color of the light passing through. Burrows teaches a plate with a phosphor material that can convert the color of light passing through (col 3, ln 13+). It would have been obvious for one of ordinary skill in the art to use the diffuser plate having phosphors of Burrows in the device of West to provide a diffuser that can convert light to a desired color. One would have been motivated to make this combination where it is desired to produce colored light.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. PARK ET AL. US PAT 7287891 discloses a backlight with LEDs having lenses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EVAN DZIERZYNSKI whose telephone number is (571)272-2336. The examiner can normally be reached on Monday through Friday 8:00 am -4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached on M-F (571)-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Evan Dzierzynski/
Examiner, Art Unit 2875

Application/Control Number: 10/561,992
Art Unit: 2875

Page 7